



CITY OF HAMILTON
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Growth Management Division

TO:	Chair and Members Planning Committee
COMMITTEE DATE:	May 20, 2014
SUBJECT/REPORT NO:	Residential Drainage Assistance Pilot Program – Interim Report (PED14105) (City Wide) (Outstanding Business List Item)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	George Berenyi (905) 546-2424 Ext. 2624 Gavin Norman (905) 546-2424 Ext. 1322
SUBMITTED BY:	Neil Everson Acting General Manager Planning and Economic Development Department
SIGNATURE:	

RECOMMENDATION

- (a) That the Residential Drainage Assistance Pilot Program (RDAPP) be extended to September 2015 to match the Enforcement of Blocked Swales Pilot Program (Report PED13084);
- (b) That the temporary full-time equivalent (FTE) position (Residential Drainage Assistance Project Manager) reporting to the Manager of Engineering Approvals also be extended and the position be funded from Capital Account No. 5181159150 at an estimated staff cost of \$162,000 for the period of May 2014 to September 2015;
- (c) That the implementation of drainage improvements identified in the Capri Crescent Drainage Study (Ward 5), with an estimated cost of \$25,000 for permits and works within the public right-of-way, be approved and funded from Capital Account No. 5181159150;
- (d) That the implementation of drainage improvements identified in the Martingrove and Janis Drainage Study, with an estimated cost of \$25,000 for permits and works within the public right-of-way, be approved and be funded from Capital Account No. 5181159150;

- (e) That recommendations (c) and (d) be subject to:
- (i) An appropriate agreement between the City and the identified landowners for the above grant monies based on the provisions of the RDAPP in a form satisfactory to the City Solicitor;
 - (ii) In the event of a shortfall of funds for works located on private property, a portion of the cost of works located on private property may be funded from the local Councillor's Area Rating Funds or available surplus Capital accounts or WIPS with the preceding being subject to the identified landowners undertaking the work in accordance with the City's tendering policies, purchasing policies, and the identified homeowners obtaining all necessary permits.

EXECUTIVE SUMMARY

This report is intended to provide an update on the current status of the RDAPP and to obtain approval to proceed with funding the construction works identified for the Capri Crescent Study Area (Ward 5) and Martingrove and Janis Study Area (Ward 13). A final report on detailing the successes and failures of the RDAPP will be prepared upon completion of the RDAPP.

RDA Pilot Program Project Status

In October 2011 Report PED10091(d) was approved by Council. The report included a recommendation to establish a RDAPP as a two (2) year pilot program. The pilot program commenced in April 2012, and was scheduled to run until April 2014. Appendix "A" to Report PED14105 contains a copy of the approved Terms of Reference. A total budget of \$520,000 was approved consisting of \$220,000 for staff salaries and \$300,000 for consultants, construction and expenses.

Staff recommends that the RDAPP be extended from April 2014 to September 2015, so that it runs concurrently with the Enforcement of Blocked Swales Pilot Program established by Municipal Law Enforcement (MLE), and currently planned to run until September 2015 (PED13084). In addition, this will allow for completion of ongoing project commitments.

Since April 2012, a total of seven (7) engineering studies have been initiated as follows:

- Two (2) projects completed including engineering investigations, permits and construction at a total City cost of approximately \$75,000;
- Two (2) preliminary engineering investigations have been completed with consultants at a cost of approximately \$10,000. Recommendations included work on private property entirely at the homeowner's cost;
- Two (2) engineering investigations approximately 95% complete which include a City contribution to the cost of work within the City road allowance. Construction expected in 2014 (subject to Council approval of this Report PED14105). City

contribution estimated to be approximately \$25,000 for works recommended in the Capri Crescent Drainage Study in Ward 5 and \$25,000 for the Martingrove and Janis Drainage Study in Ward 13. These costs are in addition to approximately \$15,000 spent to complete the engineering investigations for each study; and,

- Byron and Leckie Drainage Study (Ward 9) is approximately 75% complete with local drainage improvements being recommended. Detailed design expected in 2014 with construction expected in late 2015 (subject to Council approval). Construction costs could range to \$500,000 subject to detailed engineering and approvals.

In addition, the following activities and progress have taken place in support of the RDAPP:

- Response to approximately 146 calls to the City regarding drainage and grading disputes;
- Support and assistance to MLE, Building, and Public Works on drainage related issues including assistance with approximately 16 Property Standards Orders to comply relating to improper drainage and grading;
- Creation of a new Agreement to facilitate drainage improvements for works on private property which benefit the City; and,
- Creation of a standardized screening process and protocol for staff to utilize when responding to and investigating drainage related issues.

Capri Crescent Study Area (Ward 5) / Martingrove and Janis Study Area (Ward 13)

The above study areas are:

- Located in older areas of the City;
- Multiple properties are affected;
- Multiple flood events have occurred;
- Public and private work is required to implement a solution; and,
- A significant number of drainage issues have occurred in the area.

Staff retained Scott Llewellyn and Associates to complete drainage studies under the terms of the RDAPP. The studies recommend that drainage works be installed on both public and private property to improve the drainage situations in each area. Staff recommends that the City pay for the engineering studies and for the construction work within the public right-of-way in accordance with the Residential Drainage Assistance (RDA) funding protocol. For the work on private property, both area Councillors have indicated a desire to contribute funds to implement the solutions. The costs may be funded from the local Councillor's Area Rating Funds or available surplus Capital accounts or WIPS. To implement, staff recommends that identified homeowners enter into a Residential Drainage Assistance Program Agreement with the City in order to facilitate the project and assure contributions from affected owners are collected.

Alternatives for Consideration – See Page 10

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial:

The RDAPP was initially funded for two (2) years ending in April 2014. Table 1 summarizes the project costs identified to date.

Table 1 – Project Costs

Description	Approved Budget	Costs Incurred	Balance Remaining
Project Costs*	\$300,000	\$220,885	\$79,115
Staff Salary	\$220,000	\$130,072	\$89,928
Total	\$520,000	\$350,957	\$169,043

*Project costs include consultants, expenses and construction commitments including Capri Crescent, Martingrove and Janis Drainage Study.

Table 2 summarizes the additional staff cost required to fund the RDAPP from May 2014 to September 2015 per recommendation (b).

Table 2 – Projected Staff Costs (September 2014 to September 2015)

Time Period	Account	Budgeted Amount*	Balance Remaining (from Table 1)
May 2014 to September 2015	5181159150	\$162,000	\$169,043

*based on \$114,500 per year for 1 FTE Project Manager

Based on the above, additional funds will be required in order to complete additional engineering studies and/or construction work between May 2014 and September 2015.

Staffing:

The RDA Project Manager position is currently vacant. It is recommended that the position be filled immediately and extended to September 2015 to correspond with the Enforcement of Blocked Swales Pilot Program established by MLE.

Legal:

The RDA Project Manager will assist MLE staff, Legal Services staff and others as required for the enforcement of various drainage by-laws in addition to facilitating drainage improvement projects and assisting residents with drainage concerns. Extension of the RDAPP will provide the engineering expertise that MLE and other City departments request when responding to drainage inquiries including enforcement of blocked swales.

Capri Crescent Study Area (Ward 5)/ Martingrove and Janis Study Area (Ward 13)

The RDA funding protocol includes provisions for the City to pay for works in the City road allowance and on private property. Staff recommends the City only agree to contribute to the construction work on the condition that the identified homeowners enter into an agreement that requires maintenance of the drainage systems and catch basins to be the responsibility of each homeowner in a form satisfactory to the City Solicitor. The recommendations here are in keeping with the RDAPP approved by Council, which include the benefit of reducing the City's potential liabilities for flooding events.

HISTORICAL BACKGROUND

The City has a number of drainage and grading related tools and processes which can be utilized to assist property owners. Some of these are listed below along with a brief description of recent changes:

- Changes to the Site Alteration By-Law (see August 2013 Staff Report PED12084(b))
- Revisions to improve the Property Standards By-Law (see May 2013 Staff Report PED13084)
- Creation of Pilot Program for Enforcement of Blocked Swales (staffed in September 2013 by MLE as per PED13084)
- Revisions to Engineering Guidelines (December 2012 and further revisions expected in 2014)
- Revisions to Lot Grading Approval Process for new developments (2013) including revised communications strategy, homeowner notifications, contractor notifications, etc. (See Appendix "B" to Report PED14105.)
- Development Agreements
- Drainage Easements, Right-of-Ways

Staff and Council identified that there was a gap in the level of service provided by the City with respect to responding to chronic, private flooding issues in older parts of the City and where by-law enforcement was not viable. In October 2011, Council approved the creation of the RDAPP to fill this gap. The program is summarized below.

Residential Drainage Assistance Pilot Program

The RDAPP was established in October 2011 and staffed in April 2012. The RDAPP was intended to address a gap in the City response to residential drainage and grading issues in existing, established neighbourhoods.

Without the ability to predict the public's response to the program's availability, when the pilot commenced initially, it was estimated that staff would be able to complete four (4)

projects from start to finish over a two year period. In that respect, the nature of the program and the RDA Project Manager's position has evolved from its early stages into a catch-all for drainage and grading related complaints, disputes and issues that would have previously been shared between Public Works and Planning and Economic Development Department staff.

It was noted early on that a screening process and communication between City departments was critical to the program's success, and a process needed implementing to track and monitor responses to drainage related complaints and issues. Generally, it was noted that the first response to a drainage issue includes determining which department is responsible for leading the investigation and response. Sharing of ownership was generally not something that staff contemplated; however, in most cases there are inter-departmental issues to consider and that require an inter-departmental response to be effective.

For example, a blocked swale or catch basin may be located on private property and/or within an easement and changes could be a result of a Building Permit application in a newer subdivision with grading securities held by Growth Management Division. There could also be external drainage area from an older area intended to drain into the catch basin. In this scenario, Public Works, Building, MLE, and Growth Management may all have an interest in responding to the drainage complaint. These interests are being identified with the screening process that has been implemented. The RDA Project Manager follows up to make sure that the appropriate City Division/Section investigates and responds to the complaint. This demonstrates that often a co-ordinated interdepartmental response is critical in order to effectively resolve issues.

Capri Crescent Residential Drainage Assistance Program Study

Capri Crescent is located in Ward 5. Appendix "C" to Report PED14105 illustrates the Study Area. Most homes in the area were originally constructed in the early 1970s, prior to the existence of any formal grading policies, and were provided with separate storm and sanitary services.

Residents report that since the early 1990s, during recent heavy rainfall events, several homes in the area experienced basement and surface flooding. The flooding was exacerbated by homeowner modifications in the rear yards (sheds, gardens, etc.) and the lack of an adequate overland flow route. Steps taken by homeowners to reduce their flooding may have shifted the surface flooding and basement flooding potential to 53 and 57 Capri Crescent.

The City retained Scott Llewellyn and Associates to complete a Phase 1 engineering investigation in accordance with the RDA protocol.

To eliminate the localized flooding issues, the report and staff recommends that a private catchbasin and private storm lead connection to the municipal sewer, be constructed at 53 Capri Crescent. In this particular case, staff recommends that construction, consulting and permit costs for work on public property be paid for by the City. Per the RDA funding protocol staff recommends that construction costs for work

on private property be paid for by the owners within the study area. In the event of a shortfall of available funds for the private side works, the Ward 5 Councillor indicated a desire to contribute available area rating funds to the project as per the area rating funds protocol.

Martingrove and Janis Residential Drainage Assistance Program Study

Martingrove Drive and Janis Drive are located in Ward 3. Appendix “D” to Report PED14105 illustrates the Study Area. Most homes in the area were originally constructed in the late 1960s to early 1970s, prior to the existence of any formal grading policies, and were provided with separate storm and sanitary services. The homes are located at the base of the Hamilton escarpment.

Residents report that since approximately 2008, during and after recent heavy rainfall events, several homes in the area experienced surface flooding and ponding. The source of the surface water is a groundwater discharge source which will discharge groundwater to surface during and after precipitation events. At certain times of the year, backyards can be unusable and property damage occurs to sheds, retaining walls, basement walls.

The surface flooding has been exacerbated by homeowner modifications in the rear yards (swales, sheds, gardens, etc.) and the lack of an adequate overland flow route. Steps taken by homeowners to reduce their surface flooding may have shifted the surface flooding from neighbour to neighbour. Over time, home ownership has changed with new homeowners generally unaware of the drainage issues. In addition, over time the original subsurface drainage pipe appears to have been compromised which has eliminated the original outlet for the surface drainage.

The City retained Scott Lewellyn and Associates to complete a Phase 1 engineering investigation in accordance with RDA protocol. The study included topographic surveying, site visits, public meetings and review of background information.

To eliminate the localized flooding issues, the report and staff recommends that a private catchbasin and private storm lead with connection to the municipal sewer, be constructed at 3 Martingrove Drive. In this particular case, staff recommends that construction, consulting and permit costs for work on public property be paid for by the City. Staff recommends that construction costs for work on private property be paid for by the owners within the Study Area. In the event of a shortfall of available funds for the private side works, the Ward 13 Councillor indicated a desire to contribute 50% of the private construction costs using available reserve funds to the project as per reserve funds protocol.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The Project Manager for the RDAPP provides assistance in the form of engineering expertise to MLE and other City departments with respect to drainage, grading and flooding issues. The presence of the RDA Project Manager increases the effectiveness of the City response to drainage and grading related inquiries.

Capri Crescent Study Area / Martingrove and Janis Study Area

Completion of the recommended drainage improvements for the Capri Crescent Study Area and the Martingrove and Janis Study Area complies with Council approved mandate of facilitating drainage solutions for private properties through the pilot RDAPP.

RELEVANT CONSULTATION

Planning and Economic Development - Municipal Law Enforcement
Corporate Services – Finance
Corporate Services – Legal Services
Public Works - Hamilton Water, Infrastructure Planning and Systems Design

Capri Crescent Study Area / Martingrove and Janis Study Area

Homeowners within the Capri Crescent Study Area and Martingrove and Janis Study Area were consulted and indicated a willingness to co-operate and utilize the pilot RDAP. A public meeting for identified residents within each of the Study Areas was held.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

Appendix “E” to Report PED14105 includes a Summary Map showing the location of drainage related contacts and projects by Ward.

Going forward, the rate at which queries are received is expected to increase. There are a number of linkages across City departments with respect to drainage and grading issues and processes, therefore, it is desirable to have a focused team of staff members from various City departments to jointly address these issues and to provide engineering support. It is expected that staff response and effectiveness will increase as additional resources such as the RDA Project Manager and MLE Officer full-time are provided and as co-operation and communication increases amongst City departments.

Since April 2012, a total of seven (7) engineering studies have been initiated as follows:

- Two (2) projects completed including engineering investigations, permits and construction at a total City cost of approximately \$75,000;
- Two (2) preliminary engineering investigations have been completed with consultants at a cost of approximately \$10,000. Recommendations included work on private property;
- Two (2) engineering investigations approximately 95% complete and include a City contribution to the cost of work within the ROW. Construction expected in 2014 (subject to Council approval of this Report PED14105). City contribution estimated to be approximately \$25,000 for works recommended in the Capri Crescent Drainage Study and \$25,000 for the Martingrove and Janis Drainage Study.

These costs are in addition to approximately \$15,000 spent to complete the engineering investigations for each study; and,

- Byron and Leckie Drainage Study (Ward 9) is approximately 75% complete with local drainage improvements being recommended. Detailed design expected in 2014 with construction expected in late 2015 (subject to Council approval). Construction costs could range to \$500,000 subject to detailed engineering and approvals.

In addition, the following activities and progress have taken place in support of the RDAPP:

- Response to approximately 146 calls to the City regarding drainage and grading disputes;
- Support and assistance to MLE, Building, and Public Works on drainage related issues including assistance with approximately 16 Property Standards Orders to comply relating to drainage and grading;
- Creation of a new Residential Drainage Assistance Program Agreement specifically to facilitate drainage improvements for works on private property which benefit the City; and,
- Creation of standardized screening process and protocol for staff to utilize when responding to and investigating drainage related issues.

The recommended extension of the RDAPP until September 2015 will allow delivery of the above outstanding project commitments and allow for further improvement to existing protocols and agreements.

Capri Crescent Study Area / Martingrove and Janis Study Area

Staff Report PED10091(d) provided the background and framework for establishing the RDAPP. Appendix “A” to Report PED14105 contains the approved Terms of Reference for the program. Staff identified the above areas as good candidate for the pilot program, as it met the main criteria for inclusion, which includes:

- Located in an older area of the City;
- Multiple properties are affected;
- Multiple flood events have occurred;
- Public and private work is required to implement a solution; and,
- A significant number of drainage issues have occurred in the area.

ALTERNATIVES FOR CONSIDERATION

The following alternatives are available to Committee:

a) Residential Drainage Assistance Program

- i) Allow the RDAPP to terminate on its original end date of April 2014;
- ii) Select a shorter or longer duration for the RDAPP; or,
- iii) Create and fund a permanent RDAPP.

b) Capri Crescent Residential Drainage Assistance Program Study

- i) Deny funding for the project; or,
- ii) Provide an alternative level of funding for the project.

c) Martingrove and Janis Residential Drainage Assistance Program Study

- i) Deny funding for the project; or,
- ii) Provide an alternative level of funding for the project.

ALIGNMENT TO THE 2012 – 2015 STRATEGIC PLAN

Strategic Priority #1

A Prosperous & Healthy Community

WE enhance our image, economy and well-being by demonstrating that Hamilton is a great place to live, work, play and learn.

Strategic Objective

- 1.2 Continue to prioritize capital infrastructure projects to support managed growth and optimize community benefit.
- 1.5 Support the development and implementation of neighbourhood and City wide strategies that will improve the health and well-being of residents.
- 1.6 Enhance Overall Sustainability (financial, economic, social and environmental).

Strategic Priority #2

Valued & Sustainable Services

WE deliver high quality services that meet citizen needs and expectations, in a cost effective and responsible manner.

Strategic Objective

- 2.1 Implement processes to improve services, leverage technology and validate cost effectiveness and efficiencies across the Corporation.
- 2.2 Improve the City's approach to engaging and informing citizens and stakeholders.
- 2.3 Enhance customer service satisfaction.

Strategic Priority #3

Leadership & Governance

WE work together to ensure we are a government that is respectful towards each other and that the community has confidence and trust in.

Strategic Objective

3.2 Build organizational capacity to ensure the City has a skilled workforce that is capable and enabled to deliver its business objectives.

APPENDICES AND SCHEDULES ATTACHED

Appendix “A” to Report PED14105 - Residential Drainage Assistance Program Terms of Reference

Appendix “B” to Report PED14105 - Homeowner Notifications

Appendix “C” to Report PED14105 - Study Area - Capri Crescent Residential Drainage Assistance Program

Appendix “D” to Report PED14105 - Study Area - Martingrove and Janis Residential Drainage Assistance Program

Appendix “E” to Report PED14105 - Summary of Contacts by Ward

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